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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,588	10/07/2005	Hermann Scholz	FA/245	6032

28596 7590 10/25/2010

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EXAMINER	
ANDERSON, AMBER R	
ART UNIT	**PAPER NUMBER**
3765	

MAIL DATE	DELIVERY MODE
10/25/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/525,588	SCHOLZ, HERMANN	
	Examiner	Art Unit	
	AMBER R. ANDERSON	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 May 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-25 and 27-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-25 and 27-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

This is in response to RCE filed May 28, 2010. Claims 23-25 and 27-36 are currently pending, of which Claims 22 and 28 have been amended.

Applicant's First Argument: All the layers are enveloped in a waterproof plastic sheet. Where the layers are enclosed in a plastic, waterproof envelope, applicant respectfully asserts that one skilled in the art would not understand this to read on a garment that comprises an infrared reflective material comprising a water-vapor permeable metallic ply in concert with an air permeable convective ply. The perforated material layers of Reed would not be air permeable within the structure as claimed by applicant since the blanket is enclosed in a plastic envelope.

Examiner's Response: The examiner is relying on the embodiment of Fig. 3 and 4 wherein there is no waterproof envelope but where the layers are enclosed between layers of fabric (28 and 34) thus the garment would be air permeable.

Applicant's Second Argument: This arrangement does not disclose or suggest applicants claim to a material comprising an air permeable convective layer adjacent a water vapor permeable layer since the spacer sheet of Reed is below both the waterproof outer layer and the absorber sheet (therefore, there is no airflow exchange with the environment, and not air permeable within the structure), and since Reed does not disclose or suggest that the metalized plastic is water vapor permeable.

Examiner's Response: See the response to the first argument above. Further, it is noted that the applicants have not claimed the layers as the outermost layers of the garment but rather that they face the outside.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23-25, 27-29, 31, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Reed (USPN 3,349,396.

Regarding Claim 23, Reed discloses a garment (26) comprising an outer side, an inner side (Fig. 4), and an infrared-reflecting material (Fig. 4), said infrared-reflecting material comprising at least one metallized water-vapor-permeable ply (33 & 34 where 33 is metallized and 34 can be cotton which is water-vapor-permeable) having a top surface (side closest to 31) which faces the outer side (wherein it can be seen that the top side is positioned in a direction that faces the outside of the garment, i.e. the area above layer 28) and a bottom surface (34) and an air permeable, drapable and convective ply having a three-dimensionally transmissive structure (31 & 32 wherein the two layers constitute a ply), wherein the convective ply is disposed atop the top surface

of the metallized ply (Fig. 4) which faces the outer side of the garment (wherein it can be seen that the ply 31 & 32 are positioned in a direction, i.e. on top of the ply 33 & 34, that faces the outside of the garment, i.e. the area above layer 28).

Regarding Claim 24, Reed discloses wherein the convective ply has a top surface and an air-permeable sheetlike structure (32, where this layer is made of a fabric and is inherently air-permeable to a degree) is disposed on this surface.

Regarding Claim 25, Reed discloses wherein an air-permeable sheetlike structure is a constituent part of the convective ply and itself forms the top surface of the convective ply (32, where this layer is made of a fabric and is inherently air-permeable to a degree and is an essential part, i.e. constituent part of, the convective ply and forms the tops surface, Fig. 4).

Regarding Claim 27, Reed discloses wherein the convective ply is not less than 2 mm in thickness (Col. 5, lines 42-44).

Regarding Claim 28, Reed discloses wherein the convective ply has a structure that is riblike, honeycomblike, pimpled, netlike, deflocked, foamike (Fig. 4; Col. 5, lines 34-38).

Regarding Claim 29, Reed discloses wherein the convective ply comprises spaces (16) perpendicular to the one or more of the surfaces of the metallized ply (Fig. 4; Col. 5, lines 34-38).

Regarding Claim 31, Reed discloses wherein the convective ply is selected from the group of materials comprising polypropylene, polyester, polyurethane, polyethylene, polyamide, and combinations thereof (Col. 6, lines 57-60).

Regarding Claim 35, Reed discloses wherein the metallized ply comprises a metallized textile (Col. 6, lines 70-73).

Regarding Claim 36, Reed discloses wherein the metallized ply comprises a metallized membrane (Col. 7, lines 38-40).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (USPN 3,349,396) in view of Kim et al. (USPN 6,007,898).

Reed discloses a thee-dimensional pimpled compressible material made of a film as the convective ply. Reed does not disclose the material being a knit. Kim et al. teaches a compressible material that is pimpled and can be made from wovens, knits, or non-wovens (Fig. 1; Col. 2, lines 61-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the convective ply out of a compressible pimpled knit as a simple substitution of one well known compressible three-dimensional material for another to yield the predictable result of providing a material that is compressible and pimpled.

5. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (USPN 3,349,396).

Regarding Claims 32-34, Reed does not specifically disclose the air permeability in the z direction of the convective ply to be at least 100 l/m^2s at a pressure of 10 Pa, the air permeability in the x and y direction of the convective ply to be at least 50 l/m^2s at a pressure of 10 Pa, and the air permeability of the sheetlike structure to be at least 50 l/m^2s at a pressure of 10 Pa. However, applicant's specification is silent as to the criticality of these values (i.e., why is 100 l/m^2s at a pressure of 10 Pa in the z direction better than 50 l/m^2s at a pressure of 10 Pa?).

Therefore, it would have been well known to one of ordinary skill in the art at the time the invention was made to have chosen values of air permeability that would suit the conditions in which the garment is to be worn, since it has been held that

discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMBER R. ANDERSON whose telephone number is (571) 270-5281. The examiner can normally be reached on Mon-Thur, 8am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AMBER R ANDERSON/ October 21, 2010
Examiner, Art Unit 3765

/GARY L. WELCH/

Supervisory Patent Examiner, Art Unit 3765